

Your initial draft was good, but this is much better. You've really got some excellent detail here, and your project will benefit from that.

Good job.

G 4

F 8 — truly a great job on this aspect

D 6

U 4

I 4

S 4

A 4

P 6

40



Dinner Wizard

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Goal

Dinner Wizard is web application meant to mimic the advanced cooking technique of improvisation with limited **ingredients**. It provides its users with a number of meal ideas based on what they already have **on-hand**, or, conversely, provides a list of ingredients to buy based on what they have on-hand and what kind of dish they want to prepare.

Good.

Features

Fridge to Stove

Users will be able to select basic ingredients that are in their fridge or pantry to construct an ⁱInventory of **what they have on-hand**. These ingredients will be sorted by category in a nested **accordion** for ease of selection (see Figure 1). Users will also be able to click to remove items from the ⁱInventory. Based on the items in the Inventory, Dinner Wizard will have a **list of recipes** available for users' selection^s, accessed by clicking or tapping the button visible on **every** screen that displays the number of recipes available in the database that match both the contents of the Inventory and any selected filters. When the Inventory is empty, **this button will treat it as if all ingredients are available** and display the total number of **recipes** in the database. Temperatures will be displayed in degrees Fahrenheit, and the option to convert these to Celsius is being discussed.

↳ this should be easy!

Filter Recipes

There will be a number of selectable options available when it comes to narrowing down a list of recipes or choosing just what to make (see Figure 2).

Flavor, Dish Type, Vegetarian, Under 30 Minutes

Users will be able to sort or filter recipes by simple attributes belonging to the groupings that make up the recipes available. Under Flavors, culturally-inspired

I do not understand why you're capitalizing "inventory", but there must be a reason, because it's consistent.

flavors such as Mexican, Chinese and Italian will be available. Dish Types will include such categories as Casserole, Meat and Starch, Soup, Rice Dish, and Pasta. Under 30 Minutes will not include preparation time for any complex components such as tomato sauce from tomatoes rather than a jar, velveting meats or stock.

Only These Ingredients and Exclude This Ingredient

Choosing Only These Ingredients will restrict recipes displayed to those using only the ingredients in their Inventory, rather than the default of also including ingredients users may not have on-hand. Choosing Exclude This Ingredient will exclude any recipes that include a chosen ingredient, swapping it for a substitute if possible, to provide the largest number of recipes from which to choose.

Cost Cutter

Cost Cutter will apply the cheapest ingredient substitutions, which may affect dish flavor and quality, and often will lean toward vegetarian options; meat is expensive. It is worth noting that there will be times when substitutions will not be available, and substitutions when using this option will be the result of a ranking of ingredients in each category by most common prices. Research will be performed with several trips by at least one member of the team to different grocery stores to approximate the relative prices of various ingredients.

Equipment Needed and Dorm Room Cooking

Similarly to choosing ingredients or flavors, users may select which equipment they have available to use, they will also be able to exclude certain tools or appliances if they do not have certain items, e.g., a food processor, oven or stovetop. Dorm Room Cooking will be an advanced form of equipment filtering and will exclude any

recipes that require appliances other than a microwave, a blender and water kettle.

Alternatively, **this filter may replace procedures in a limited number of recipes with those modified to only use very limited appliances and resources.**

Complex Components

Complex components are ingredients that require additional preparation and, in some cases, may be substituted for pre-made items. These mini recipes will be made available to users when they click on the ingredient in an ingredient list for a recipe and will be displayed in a smaller pane to the side of the ingredient list (see Figure 3). The option to replace the complex component with a pre-made version (if applicable) or other substitutions will be in the form of a button in the new pane, which will close said pane and replace the complex component with either the only available substitution or a menu of all available substitutions. These mini recipes will also be available from any other listing of ingredients, where they will be displayed in the same way as all other recipes.

Substitutions and Optional Ingredients

While ideally ingredient substitutions will happen automatically based on users' constructed inventory, sometimes it might not be best to produce every variation on a recipe, especially if most ingredients may be replaced. In this case, it will be simpler to display either the primary ingredient name or the ingredient category instead and offer a tooltip on hover that there are substitutions available, accessed via clicking on the ingredient to display a drop-down menu. Recipe ingredients that have substitutions will be ranked from most suitable to least suitable on a per-recipe basis. Optional ingredients will also have a tooltip or popover displayed from either hover or click that denotes their optional status. The option to hide optional ingredients altogether is under consideration.

General Tips and Preparation Section/Window

Similar to complex components, preparation tips for some ingredients will be available to users **when they click the appropriate ingredient** in the ingredient list for a displayed recipe. Tips on the preparation of that ingredient will be displayed in a smaller pane to the side of the ingredient list, in the same space in which complex component formulae will **otherwise be displayed** (see Figure 3). The option to hide preparation tips is under consideration.

Cooking Term Definition Tooltips or Popovers

As users may not **be familiar** with some cooking terms, tooltips (or popovers) will be available that define various terms and procedures. While we intend to limit the need for this feature as much as **possible by using descriptive phrases** rather than jargon, some terms may be **unavoidable, thus necessitating a way** to define these terms. The option to hide these hints is under consideration.

Recipe to Shopping List/Weekly Meal-Planning

An alternate use of **the flow of construct inventory → filter recipes**, this feature is contingent on users not selecting the Only These Ingredients option. This feature will take the items in a **selected recipe** that are not in users' inventory and build a second inventory-style list titled 'Shopping List' out of those items. This list will also include the ingredients of complex components, with the option to replace the complex components with pre-made items. **An advanced version** of this will allow users to select multiple recipes and build a **shopping list** for an entire week. As amounts in recipes and in inventory construction will not necessarily be defined, these shopping lists may need additions by users.

Random Recipe

This option will be available via a button visible on all pages, and it will choose a recipe at random to display in recipe view. If ingredients are already selected for users' inventory, the random recipe button will use those Ingredients to filter recipes and/or ingredient groupings.

User Entry of Unlisted Ingredients and Groupings/Flavors

Users will be able to enter ingredients not found in the database themselves and choose how these **Ingredients** should be associated with other ingredients, flavor groupings and recipe groupings. These custom ingredients and associations will be stored in association with that user only, necessitating a user account and login feature. The ability to share these **custom ingredients, groupings** and recipes is under consideration.

Display Suggested Ingredient Ratio

Pie charts showing four to six of the main (most important) ingredients and their proportions in relation to **everything else** within groupings and recipes may be optionally displayed when viewing recipes or flavor groupings. These charts will be displayed in the same space in which the complex component mini recipes (see Figure 4) appear.

Display Amounts for Ingredients

This feature will display approximated amounts for ingredients in recipes, inventories and shopping lists, allowing more comprehensive shopping lists to be generated and allow the potential for **scaling based** on number of portions to be made. Having amounts will allow users' inventories to be adjusted based on what they have chosen to make, provided they remember to select the recipe.

Login and User Accounts

The user accounts will be mainly for the creation of user-defined recipes and ingredients, as well as the ability to save inventories and shopping lists. This will also allow users to enter **custom** ingredient groupings and ingredients not listed in Dinner Wizard's database.

Mobile Support

This application will look and react in essentially the same way on mobile devices as on desktop or laptop browsers. Navigation between screens will be very similar to that on larger screens (see Figures 5 and 6). Inventories will be built in the same way from ingredients listed in an accordion (see Figure 7), but at the narrower phone screen width, users will need to scroll to the side to view the inventory itself. Likewise, when selecting a recipe, users will be unable to view the procedure at the same time as the recipe listings at a phone screen's smallest width (see Figure 8). Users will be able to view the procedures, as with wider screens, by selecting the desired recipe. In Recipe View, users will still have access to all the additional information they would have on larger screens, such as ratio charts, **preparation** tips and the mini recipes for complex components, but they will be displayed as popovers when the appropriate element of the recipe is selected (see Figures 9 and 10). Filter selection will remain the same as on larger screens (Figure 11).

Component Details

The site will initially be structured with HTML and CSS. We will be using a SQL database to store our recipes, ingredients **and** their relationships. PHP will bring us from the database to our page, where we will manipulate the presentation of the data based on user input with AngularJS,

Much improved to have this explanation of your figures than the way it was in your draft.

which will provide major simplifications to interaction code. AngularJS will also be used for single page navigation via its routing capabilities. AngularUI Bootstrap will be used in conjunction with AngularJS for **refinement** of layout and its widgets, which interact more cleanly with AngularJS than jQuery (**which** is used with Twitter Bootstrap), and for its ease of use in constructing responsive layouts. Because we will be using this framework, much of the logic necessary for elements such as **buttons** and **accordions**—all heavily used in Dinner Wizard's design (see Design Samples)—**will already** be implemented for us as complete elements, and we will only need to add our data and specific styling.

If the stretch goal of the **Ingredient Ratio Chart** is realized, the graphs themselves will be created via HTML5 canvases. **This** decision was chosen so that the process of creating the graphs themselves would not require work beyond the initial investment; the alternative of image-based graphs would require someone to **manually** turn the data into a graph each time a new recipe is created, and also ensure that **any** modifications to the data or style of the graphs as a whole are properly kept in sync even after creation. Dynamically generating the graphs solves both problems.

Users

Intended users of Dinner Wizard are those who seek a relaxed approach to cooking, with any levels of experience and who **don't want** to have to closely follow recipes with strict measurements and advanced **terminology**. **This** may be particularly attractive to inexperienced home cooks, especially as it will nurture a sense of how ingredients 'go together' to make certain culturally-inspired flavors or **certain** types of dishes. Inspired by 'No-Recipe Wednesdays' from *The New York Times Cooking* app, newsletter and webpage, this application is meant to get people cooking, learning and building their own intuition on how to take things from their fridge

to stove to plate.

Users will need to have some English reading proficiency and be able to operate a mouse to move the cursor across the **screen in order to interact** with all the elements of the application. Users will also need to be able to understand or be able to puzzle out how to interact with an accordion and possess otherwise basic computer and browser operation skills.

good addition

Discussion of Potential Issues and Setbacks

Potential issues will include the time it will take for data compilation and entry, especially given the complex nature of the **relationships between** all components of the data we plan to present. Learning new **frameworks, namely Bootstrap**, and expanding our understanding of frameworks we have used previously (AngularJS) will also prove challenging in addition to progressing toward each of our **set goals at any given point** in the course of this project. Working with a database as well will **be new to some members** of this team. As this is a group project, issues common when working in groups, particularly new groups, are likely to occur. These issues include miscommunication over any number of things, lulls in communication at vital points, disagreements on **style and design** and becoming accustomed to working with each other.

Allowance has been built into our preliminary schedule for encountering and overcoming all of the issues listed here. As such, a number of the due dates listed are flexible by a day or two. As far as communication issues are concerned, we've made it a point to communicate as much as we possibly can, using a Google Doc as a whiteboard and sending out email updates frequently. Disagreements, if they escalate past the point where careful breakdown of points and rephrasing explanations can take care of **the problem**, will be taken to a mediator (Professor Heines). Often disagreements can be the result of some form of miscommunication, so it is **our** hope that by communicating as much as possible, this issue may be avoided or resolved before it escalates.

If you communicate well, I doubt very much that you'll need me to mediate anything. :)

Preliminary Roadmap

Good.

Task	Date	Stage	Susan	Tommy	Matt
Project Proposal	2/03	Pre	X		
Layout <u>rough</u> realization	2/07-09		X		
Database design	2/07-11			X	X
Addtl. Framework Research & Feasibility Trials	2/09		X	X	
Data Entry (sample set, three 'recipes')	2/11				X
User Inventory Construction	2/12-16		X		
Fridge to Stove basic functionality	2/22-24		X	X	
Core Recipe Filters	2/22-24			X	
Initial Testing (functionality, early flow)	2/22-24	Alpha	X	X	X
Aesthetic Polish/Site Design Realization	3/12		X		X
Fridge to Stove Functionality Polish	3/14			X	
Complex Components Mini Recipes and Substitutions	3/24		X		
Substitutions, Optional Item Tooltips/ Interaction	3/24				X
Data Entry (expand to more than three recipes)	4/01				X
Data Compilation (recipe construction, attributes)	3/30		X	X	
[Stretch] Random Recipe Button	4/07 or 4/20				X
[Stretch] Ingredient Prep Tips	4/10 or 4/20		X		
More Testing, Polish	4/14	Beta	X	X	X
Usability Testing (in-class) & Writeup	4/14	Beta	X	X	X
[Stretch] Mobile/Responsive Layout Support Polish	4/20			X	
[Stretch] Cost-Cutter and Equipment Filters	4/20			X	
[Stretch] Ratio Chart	4/10-20		X		X
Polish, Polish, Polish...Test, Test, Test	4/20-22		X	X	X
Final Presentation	4/23	Gold	X	X	X

Acceptability Criteria

Core

- Fridge to Stove
- Inventory Building
- Basic Filters
- 'Exclude This Ingredient' Filter
- 'Only These Ingredients' Filter
- Complex Components
- Substitutions and Optional Ingredients
- Cooking Terms Help

Stretch Goals

- Random recipe display
- Suggested Ingredient Ratio Graphic
- Cost Cutter Filter
- Equipment and Dorm Room Cooking filters
- Ingredient Preparation Tips
- Shopping List/Weekly Planning

Out of Scope Features

- Amounts for ingredients in recipes
- Login/User Accounts
- User entry of Ingredients and custom groupings

Good.

Design Samples

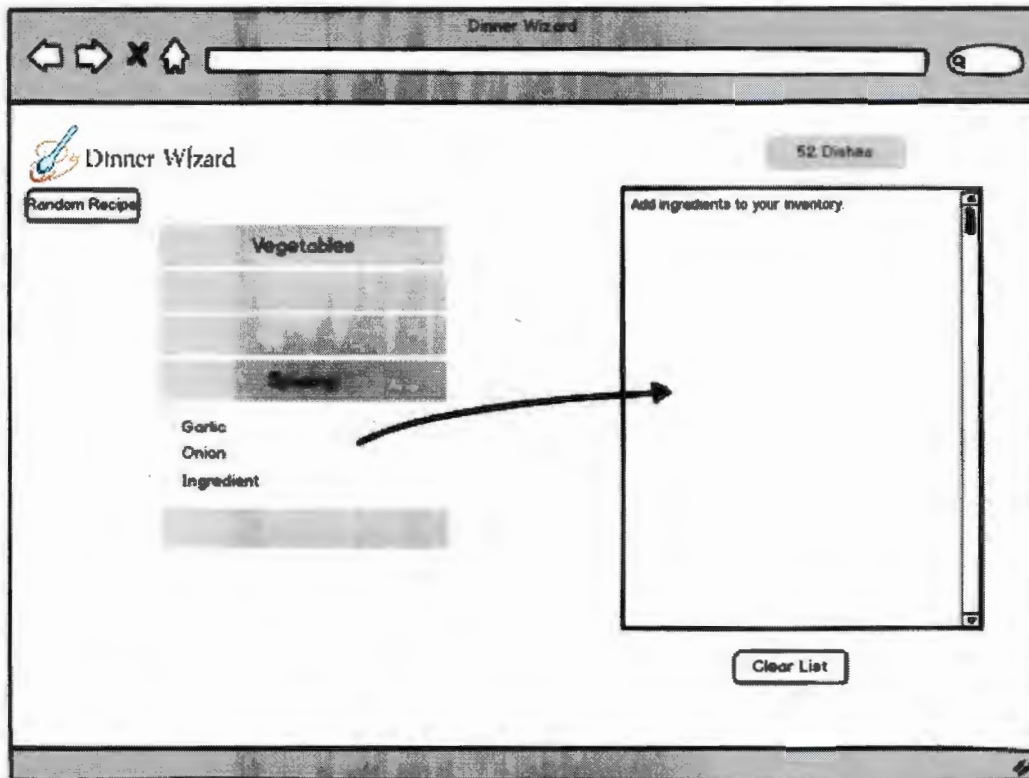


Figure 1 - Build an inventory



Figure 2 - Recipe filters selection

*excellent
screen
mock ups*

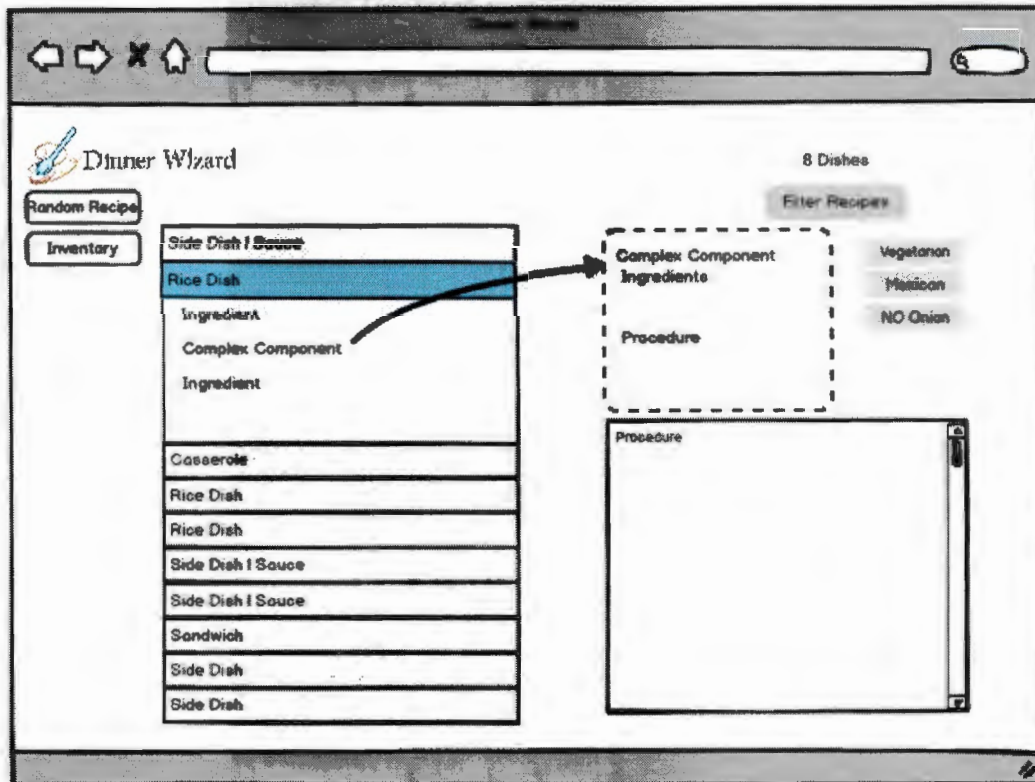


Figure 3 - Recipe view with complex component mini recipe and selected filters showing

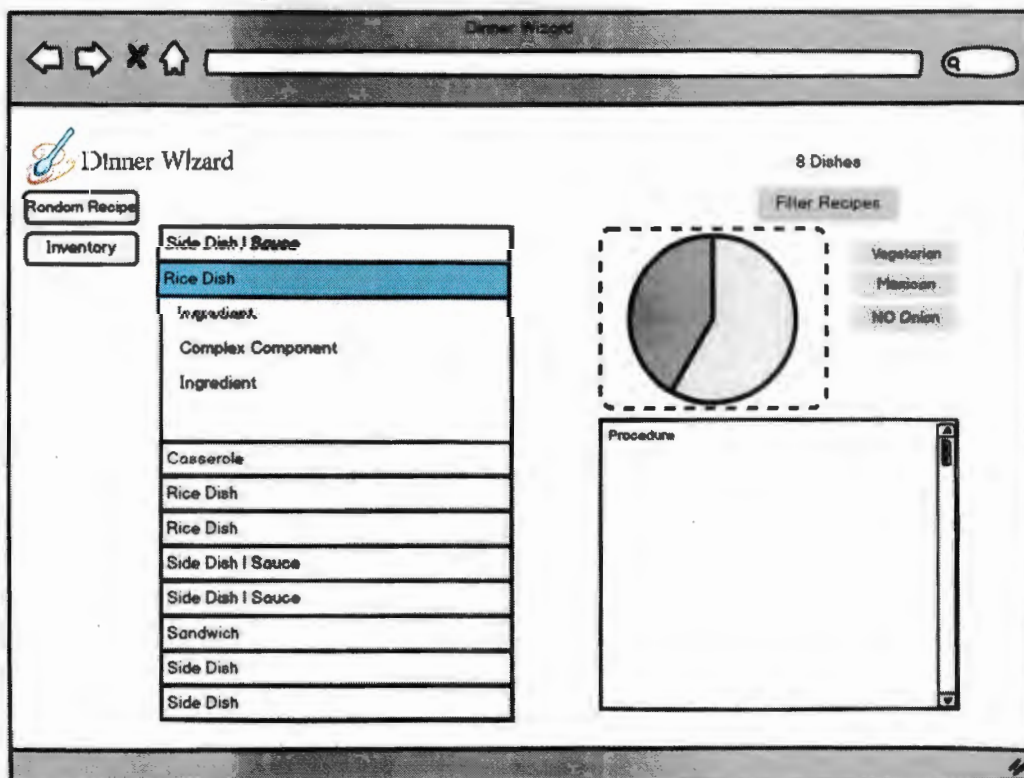


Figure 4 - Ratio Pie Chart Placement in Recipe View

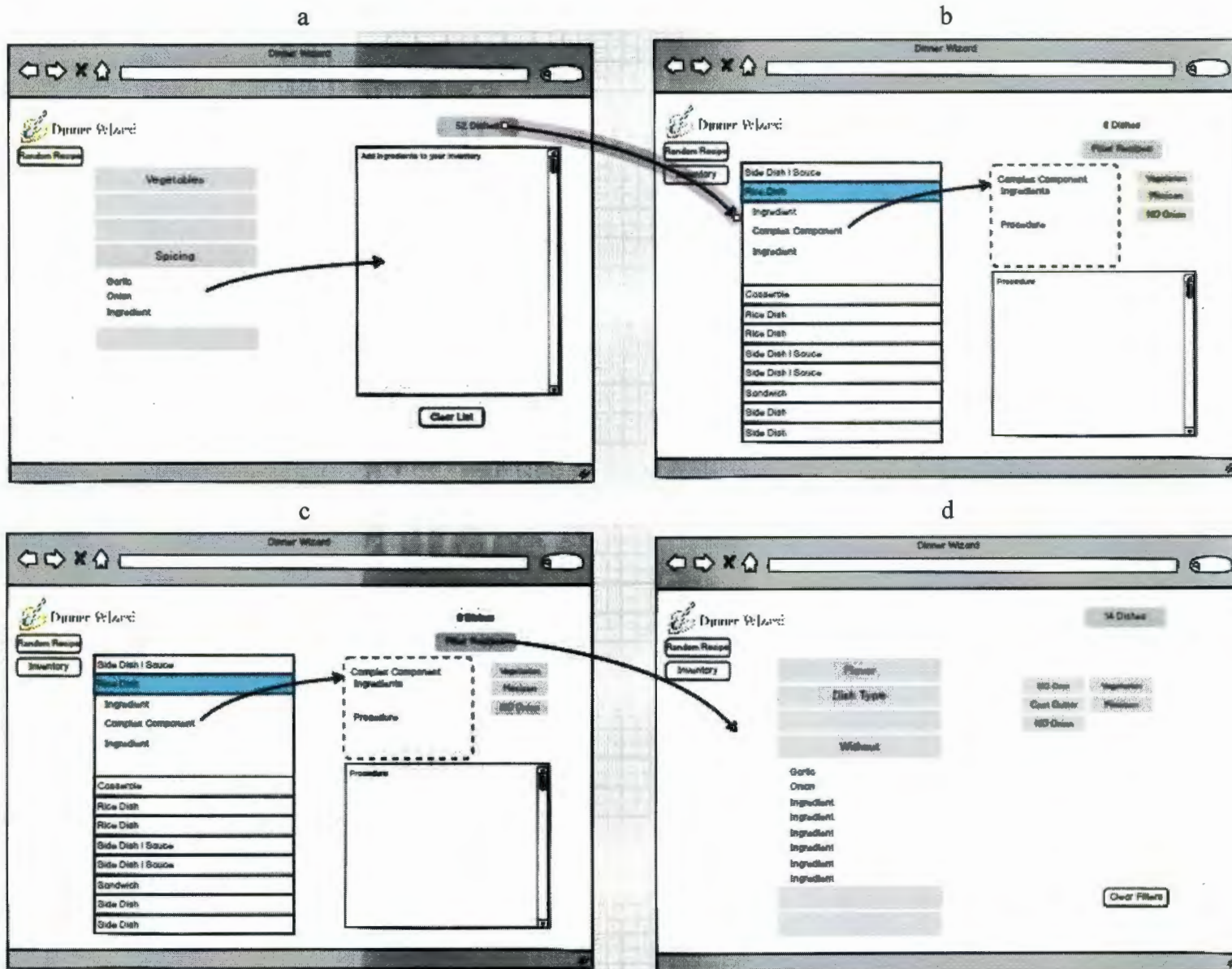


Figure 5 - Basic navigation on desktop or laptop browser. (a)Build Inventory; interact with # Dishes Button to access Recipe View/Selection(b),(c); interact with Filter Recipes Button to access Filter Recipes screen(d).

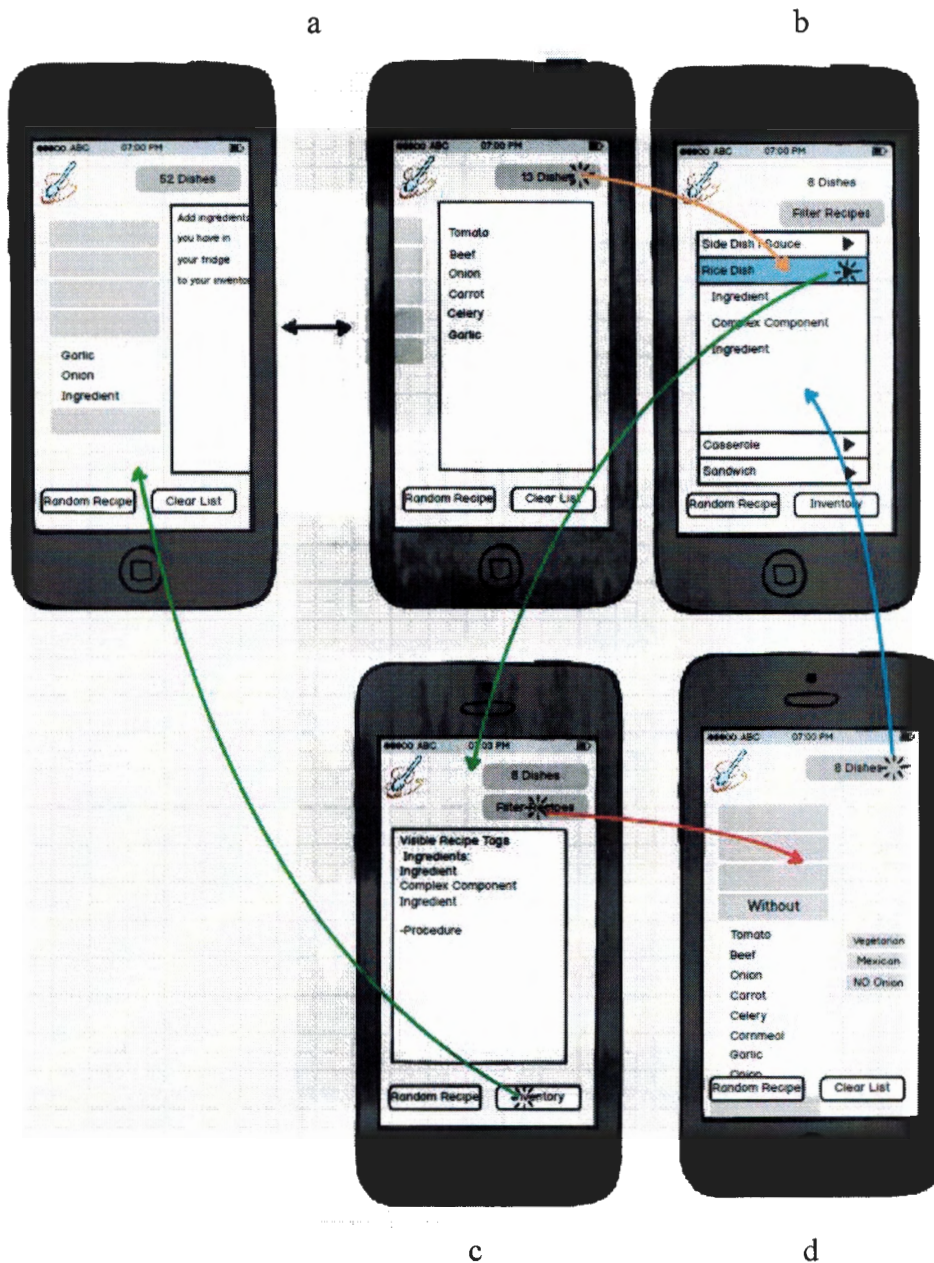


Figure 6-Basic navigation on small screen mobile devices. (a) Build Inventory; interact with # Dishes Button to access Recipe Selection (b); interact with the listed recipe to access Recipe View (c). Interact with Filter Recipes Button to access Filter Recipes screen (d). Interact with Inventory button whenever it is visible to return to the Inventory building screen; interact with # Dishes button to get to Recipe Selection.

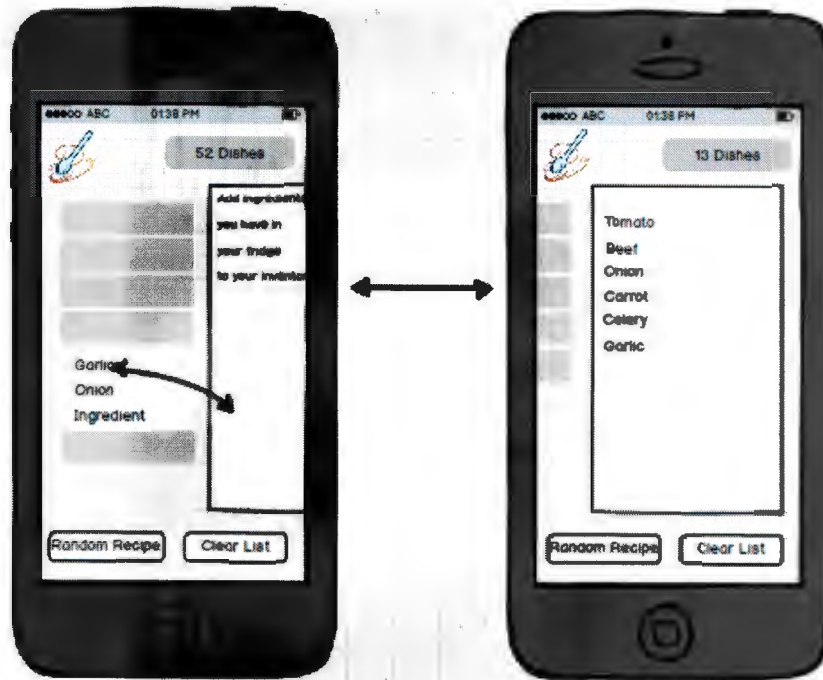


Figure 7 - Build an inventory



Figure 8 - Recipe Selection and Recipe View



Figure 9 - Recipe View and Recipe View with a Complex Component Procedure Popover

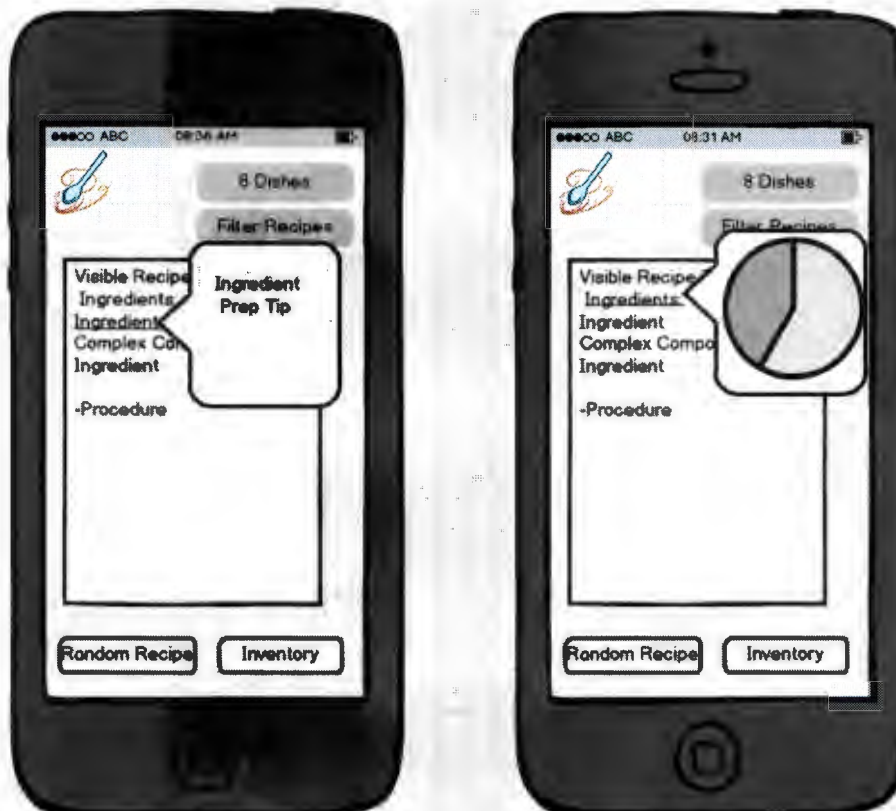


Figure 10 - Recipe View with Ingredient Prep Tip and Ratio Chart Popovers



Figure 11- Mobile Filter Recipes View

Much better use of figures throughout.